

Math
7296-43

National Mathematics Magazine

This Journal is dedicated to the following aims: (1) Through published standard papers on the culture aspects, humanism and history of mathematics to deepen and to widen public interest in its values. (2) To supply an additional medium for the publication of expository mathematical articles. (3) To promote more scientific methods of teaching mathematics. (4) To publish and to distribute to the groups most interested high-class papers of research quality representing all mathematical fields.

Index Volume 9

October, 1934 to May, 1935

Published eight times per year at Baton Rouge, Louisiana

EDITORIAL BOARD

T. A. BICKERSTAFF
University of Mississippi
University, Mississippi

W. VAN PARKER
Ga. School of Technology
Atlanta, Georgia

W. PAUL WEBBER
La. State University
Baton Rouge, Louisiana

RAYMOND GARVER
Univ. of Cal. at Los Angeles
Los Angeles, California

I. MAIZLISH
Centenary College
Shreveport, Louisiana

JOS. SEIDLIN
Alfred University
Alfred, New York

H. LYLE SMITH
La. State University
Baton Rouge, Louisiana

S. T. SANDERS
Editor and Manager
P. O. Box 1322

MRS. E. J. LAND
Advertising and Circulation
216 Main Street

WILSON L. MISER
Vanderbilt University
Nashville, Tennessee

IREY C. NICHOLS
La. State University
Baton Rouge, Louisiana

JAMES MCGIFFERT
Rensselaer Poly. Institute
Troy, N. Y.

P. K. SMITH
La. Polytechnic Institute
Ruston, Louisiana

W. E. BYRNE
Va. Military Institute
Lexington, Virginia

C. D. SMITH
Mississippi State College
State College, Miss.

DOROTHY MCCOY
Belhaven College
Jackson, Mississippi

| <i>Topic</i> | <i>Author</i> | <i>Issue No.</i> | <i>Page</i> |
|---|-------------------------|----------------------|-------------|
| Analysis and Interpretation of Survey of Present Status of Secondary Mathematics in the United States..... | Joseph Seidlin..... | 5 | 143 |
| Analytical Geometry, by Vincent C. Poor (Review)..... | R. H. Knox, Jr..... | 3 | 85 |
| Background in Mathematics..... | W. Paul Webber..... | 6 | 154 |
| Caliban's Problem Book, by Hubert Phil- lips, S. T. Shovelton, and G. S. Mar- shall (Review)..... | Raymond Garver..... | 7 | 213 |
| College Algebra, by Walter B. Ford (Re- view)..... | P. K. Smith..... | 7 | 212 |
| Computations of the Simple Interest Rate in Installment Purchases..... | H. E. Stelson..... | 5 | 135 |
| Concerning Preparedness for College Al- gebra at the University of South Carolina..... | J. Bruce Coleman..... | 3 | 67 |
| Correlation and Secondary School Mathe- matics..... | W. D. Reeve..... | 1 | 10 |
| Critical Student Periods..... | S. T. Sanders..... | 7 | 186 |
| Differential Equations, by Max Morris and Orley E. Brown (Review)..... | W. E. Byrne..... | 1 | 23 |
| Differential Invariants of Generalized Spaces, by T. Y. Thomas (Review)..... | R. L. Smith..... | 5 | 151 |
| Fermat and Euler..... | James McGiffert..... | 3 | 68 |
| First Course in The New Mathematics. Second Course in The New Mathemat- ics. Elementary Algebra, by Edward I. Edgerton and Perry A. Carpenter (Re- view)..... | Irby C. Nichols..... | 3 | 86 |
| Foreword..... | S. T. Sanders..... | 1 | 86 |
| Forthcoming Analysis of Survey Returns..... | S. T. Sanders..... | 2 | 34 |
| Gauss, His Disquisitiones Arithmeticae, and His Contemporaries in the Institut de France..... | Waldo Dunnington..... | 7 | 187 |
| Higher Algebra, by James McGiffert (Re- view)..... | Lynn Merrill..... | 5 | 151 |
| Higher Mathematics for Engineers and Physicists, by Ivan S. Sokolnikoff and Elizabeth S. Sokolnikoff (Review)..... | Wm. E. Byrne..... | 6 | 182 |
| History of Mathematics in America Before 1900, by David Eugene Smith and Jeku- thiel Ginsburg (Review)..... | Irby C. Nichols..... | 2 | 59 |
| How to Look for the Solution..... | G. Polya..... | 6 | 172 |
| In Review..... | Joseph Seidlin..... | 8 | 241 |
| Individual Study of Mathematics..... | W. Paul Webber..... | 4 | 106 |
| Integrated Mathematics With Special Ap- plication to Analysis, by John A. Swen- son (Review)..... | P. K. Smith..... | 8 | 259 |
| Intermediate Algebra, by Aaron Freilich, Henry H. Shanholt, Joseph P. McCor- mack (Review)..... | Henry F. Schroeder..... | 6 | 183 |
| Irrational Number..... | George L. Edgett..... | 7 | 193 |
| Letter to the Editor..... | G. A. Miller..... | 3 | 72 |

GA1
M424
v.9

| <i>Topic</i> | <i>Author</i> | <i>Issue No.</i> | <i>Page</i> |
|--|-------------------|------------------|-------------|
| Louisiana-Mississippi Section of the Mathematical Association of America and the Louisiana-Mississippi Branch of the National Council of Teachers of Mathematics | Dorothy McCoy | 3 | 82 |
| Mathematics Applied | E. R. Sleight | 8 | 219 |
| Mathematics a Profession? | S. T. Sanders | 8 | 218 |
| Mathematicians, Right or Left | Dean C. H. Emmons | 6 | 166 |
| Mathematics in Japan and China | Julia T. Colpitts | 5 | 123 |
| Mathematics in the Liberal Arts College | Harvey A. Wright | 4 | 95 |
| New Models for the Solution of Quadratic and Cubic Equations | Arnold Emch | 6 | 162 |
| Note | Dewey C. Duncan | 3 | 92 |
| Note | Harry Gwinner | 3 | 92 |
| Note on Introduction of Area Concept | Lena R. Cole | 6 | 184 |
| Number of 12x12 Squares That Can be Constructed by the Method of Current Groups | A. L. Candy | 8 | 223 |
| On the Algebra of Mixtures | C. D. Smith | 5 | 138 |
| On the Discriminant of a Conic | Clifford Bell | 5 | 142 |
| Operational Equations | H. Bateman | 7 | 197 |
| Plato Mind | S. T. Sanders | 5 | 122 |
| Practical Mathematics Book | W. Paul Webber | 2 | 54 |
| Problems Proposed, No. 43 | C. D. Smith | 1 | 27 |
| " " , No. 54 | H. T. R. Aude | 4 | 111 |
| " " , No. 55 | Richard A. Miller | 1 | 29 |
| " " , No. 56 | Henry Schroeder | 1 | 30 |
| " " , No. 61 | A. F. Moursund | 1 | 31 |
| " " , No. 62 | A. F. Moursund | 1 | 31 |
| " " , No. 63 | Walter B. Clarke | 1 | 31 |
| " " , No. 64 | C. L. Wilson | 1 | 32 |
| " " , No. 65 | W. B. Clarke | 1 | 32 |
| " " , No. 66 | H. T. R. Aude | 2 | 64 |
| " " , No. 67 | Walter B. Clarke | 2 | 64 |
| " " , No. 68 | Walter B. Clarke | 2 | 64 |
| " " , No. 69 | A. W. Boldyreff | 4 | 114 |
| " " , No. 70 | Richard A. Miller | 3 | 91 |
| " " , No. 71 | A. W. Boldyreff | 3 | 91 |
| " " , No. 72 | Norman Anning | 3 | 92 |
| " " , No. 73 | A. W. Boldyreff | 3 | 92 |
| " " , No. 74 | H. T. R. Aude | 3 | 92 |
| " " , No. 74a | Walter B. Clarke | 5 | 149 |
| " " , No. 75 | A. W. Boldyreff | 4 | 118 |
| " " , No. 76 | Walter B. Clarke | 5 | 150 |
| " " , No. 77 | Richard A. Miller | 5 | 150 |
| " " , No. 78 | Vincent C. Harris | 7 | 209 |
| " " , No. 79 | Norman Anning | 7 | 210 |
| " " , No. 80 | Donat Kazarinoff | 6 | 180 |

| <i>Topic</i> | <i>Author</i> | <i>Issue No.</i> | <i>Page</i> |
|---------------------------|---------------------------------------|----------------------|-------------|
| Problems Proposed, No. 81 | Walter B. Clarke | 6 | 180 |
| " " , No. 82 | Dewey C. Duncan | 6 | 181 |
| " " , No. 83 | William E. Byrne | 6 | 181 |
| " " , No. 84 | Walter B. Clarke | 6 | 181 |
| " " , No. 85 | Norman Anning | 6 | 181 |
| " " , No. 86 | Henry Schroeder | 6 | 181 |
| " " , No. 87 | F. A. Rickey | 6 | 181 |
| " " , No. 88 | Henry Schroeder | 7 | 211 |
| " " , No. 89 | W. V. Parker | 7 | 211 |
| " " , No. 90 | Walter B. Clarke | 7 | 211 |
| " " , No. 91 | W. V. Parker | 7 | 211 |
| " " , No. 92 | W. V. Parker | 7 | 211 |
| " " , No. 93 | Dewey C. Duncan | 8 | 258 |
| " " , No. 94 | Walter B. Clarke | 8 | 258 |
| " " , No. 95 | Edmund N. Yeager | 8 | 258 |
| " " , No. 96 | Walter B. Clarke | 8 | 258 |
| " " , No. 97 | J. Rosenbaum | 8 | 258 |
| " " , No. 98 | J. Rosenbaum | 8 | 258 |
| Problems Solved, No. 43 | A. W. Randall | 1 | 27 |
| " " , No. 43 | C. H. Sisam | 3 | 89 |
| " " , No. 52 | C. A. Balof | 1 | 32 |
| " " , No. 52 | T. E. Raiford | 6 | 179 |
| " " , No. 52 | C. D. Smith | 3 | 88 |
| " " , No. 54 | C. A. Balof | 1 | 32 |
| " " , No. 54 | C. E. Melville | 4 | 111 |
| " " , No. 54 | Richard A. Miller | 1 | 32 |
| " " , No. 55 | Lloyd C. Bagby | 1 | 29 |
| " " , No. 55 | C. A. Balof | 1 | 30 |
| " " , No. 55 | W. B. Clarke | 1 | 30 |
| " " , No. 55 | Buford E. Gatewood | 1 | 30 |
| " " , No. 55 | Exa Hardin | 1 | 30 |
| " " , No. 55 | Vincent R. Noll | 1 | 30 |
| " " , No. 55 | A. W. Randall | 1 | 30 |
| " " , No. 55 | Earl Thomas | 1 | 30 |
| " " , No. 56 | Lloyd C. Bagby | 1 | 31 |
| " " , No. 56 | C. A. Balof | 1 | 30 |
| " " , No. 56 | W. B. Clarke | 1 | 31 |
| " " , No. 56 | A. W. Randall | 1 | 31 |
| " " , No. 56 | F. A. Rickey | 1 | 31 |
| " " , No. 61 | G. W. Petrie | 2 | 62 |
| " " , No. 64 | W. B. Clarke and T. A. Bickerstaff | 2 | 63 |
| " " , No. 65 | Norman Anning | 4 | 117 |
| " " , No. 65 | W. B. Clarke | 2 | 63 |
| " " , No. 65 | Rev. F. M. Kenny | 6 | 180 |
| " " , No. 65 | E. P. Starke | 2 | 64 |
| " " , No. 65 | Hobson M. Zerbe | 2 | 64 |

| <i>Topic</i> | <i>Author</i> | <i>Issue No.</i> | <i>Page</i> |
|------------------------------|------------------------|----------------------|-------------|
| Problems Solved, No. 66..... | C. A. Baloff..... | 4 | 113 |
| " " , No. 66..... | Karleton W. Crain..... | 4 | 113 |
| " " , No. 66..... | Dewey C. Duncan..... | 4 | 112 |
| " " , No. 66..... | J. H. Neelley..... | 4 | 113 |
| " " , No. 66..... | James A. Ward..... | 4 | 113 |
| " " , No. 67..... | C. A. Baloff..... | 4 | 113 |
| " " , No. 67..... | James A. Ward..... | 4 | 113 |
| " " , No. 68..... | C. A. Baloff..... | 4 | 114 |
| " " , No. 68..... | Richard A. Miller..... | 4 | 114 |
| " " , No. 68..... | James A. Ward..... | 4 | 114 |
| " " , No. 69..... | Robert C. Yates..... | 4 | 114 |
| " " , No. 71..... | C. A. Baloff..... | 4 | 115 |
| " " , No. 71..... | A. W. Boldyreff..... | 4 | 115 |
| " " , No. 71..... | H. F. S. Jonah..... | 4 | 115 |
| " " , No. 71..... | J. R. K. Stauffer..... | 6 | 180 |
| " " , No. 71..... | Robert C. Yates..... | 4 | 115 |
| " " , No. 72..... | Norman Anning..... | 4 | 116 |
| " " , No. 72..... | C. A. Baloff..... | 4 | 116 |
| " " , No. 72..... | A. W. Boldyreff..... | 6 | 180 |
| " " , No. 72..... | Walter B. Clarke..... | 4 | 116 |
| " " , No. 72..... | A. E. Meder, Jr..... | 4 | 116 |
| " " , No. 72..... | R. A. Miller..... | 4 | 116 |
| " " , No. 72..... | J. H. Neelley..... | 7 | 210 |
| " " , No. 72..... | J. Rosenbaum..... | 7 | 210 |
| " " , No. 72..... | J. R. K. Stauffer..... | 6 | 180 |
| " " , No. 72..... | Robert C. Yates..... | 4 | 116 |
| " " , No. 73..... | David F. Barrow..... | 6 | 178 |
| " " , No. 73..... | George A. Baker..... | 7 | 210 |
| " " , No. 73..... | A. W. Boldyreff..... | 6 | 178 |
| " " , No. 73..... | A. C. Briggs..... | 7 | 210 |
| " " , No. 73..... | Dewey C. Duncan..... | 6 | 177 |
| " " , No. 73..... | Julius Freilich..... | 7 | 210 |
| " " , No. 73..... | V. C. Harris..... | 6 | 178 |
| " " , No. 73..... | R. A. Miller..... | 6 | 178 |
| " " , No. 73..... | J. Rosenbaum..... | 7 | 210 |
| " " , No. 73..... | J. R. K. Stauffer..... | 6 | 178 |
| " " , No. 73..... | E. E. Whitford..... | 7 | 210 |
| " " , No. 74..... | H. T. R. Aude..... | 4 | 117 |
| " " , No. 74..... | C. A. Baloff..... | 4 | 117 |
| " " , No. 74..... | A. W. Boldyreff..... | 6 | 180 |
| " " , No. 74..... | Walter B. Clarke..... | 4 | 117 |
| " " , No. 74..... | H. F. S. Jonah..... | 4 | 117 |
| " " , No. 74..... | R. A. Miller..... | 4 | 117 |
| " " , No. 74..... | Corwin D. Moore..... | 6 | 180 |
| " " , No. 74..... | D. H. Richert..... | 4 | 117 |
| " " , No. 74..... | J. Rosenbaum..... | 7 | 210 |
| " " , No. 74..... | J. R. K. Stauffer..... | 6 | 180 |

| <i>Topic</i> | <i>Author</i> | <i>Issue No.</i> | <i>Page</i> |
|--|------------------------|------------------|-------------|
| Problems Solved, No. 74..... | Jas. A. Ward..... | 7 | 210 |
| " " , No. 74..... | Robert C. Yates..... | 4 | 117 |
| " " , No. 74..... | Hobson M. Zerbe..... | 4 | 117 |
| " " , No. 75..... | A. C. Briggs..... | 7 | 209 |
| " " , No. 75..... | Dewey C. Duncan..... | 7 | 209 |
| " " , No. 75..... | Theodore Bennett..... | 8 | 247 |
| " " , No. 76..... | Norman Anning..... | 7 | 210 |
| " " , No. 76..... | A. C. Briggs..... | 7 | 210 |
| " " , No. 76..... | Henry Schroeder..... | 6 | 178 |
| " " , No. 77..... | James A. Ward..... | 8 | 249 |
| " " , No. 78..... | A. W. Boldyreff..... | 7 | 210 |
| " " , No. 78..... | Vincent C. Harris..... | 7 | 210 |
| " " , No. 78..... | Richard A. Miller..... | 7 | 209 |
| " " , No. 78..... | Theodore Bennett..... | 8 | 251 |
| " " , No. 79..... | Norman Anning..... | 7 | 210 |
| " " , No. 79..... | Judson W. Foust..... | 7 | 210 |
| " " , No. 80..... | J. K. R. Stauffer..... | 8 | 252 |
| " " , No. 84..... | R. A. Miller..... | 8 | 254 |
| " " , No. 85..... | R. A. Miller..... | 8 | 256 |
| " " , No. 88..... | Norman Anning..... | 8 | 257 |
| Proposal for the Improvement of the Teaching of Mathematics..... | I. A. Barnett..... | 3 | 74 |
| Purpose in Teaching Mathematics..... | W. Paul Webber..... | 7 | 202 |
| Resultants and Symmetric Functions..... | C. H. Sisam..... | 2 | 46 |
| Solid Geometry, by Elizabeth B. Cowley (Review)..... | P. K. Smith..... | 4 | 119 |
| Some General Remarks Concerning Scientific Exposition (First Installment)..... | Rudolph E. Langer..... | 1 | 12 |
| Some General Remarks Concerning Scientific Exposition (Second Installment)..... | Rudolph E. Langer..... | 2 | 42 |
| Space..... | Dorothy McCoy..... | 6 | 155 |
| Special Case of a Transformation Due to Gurney..... | L. J. Adams..... | 2 | 53 |
| Startling Paradox..... | Chas. H. Sisam..... | 3 | 66 |
| Survey of Present Status of Secondary Mathematics in the United States (First Installment)..... | S. T. Sanders..... | 1 | 3 |
| Survey of Present Status of Secondary Mathematics in the United States (Second Installment)..... | S. T. Sanders..... | 2 | 35 |
| Teacher's Department in a Mathematical Journal..... | W. Paul Webber..... | 8 | 243 |
| To Construct a Magic Square of Order $2n$ From a Given Square of Order n | A. L. Candy..... | 4 | 99 |
| Trigonometry Based on a Central Conic..... | H. L. Smith..... | 3 | 69 |
| Two Graphical Treatments of the Moment of Inertia of a Plane Lamina..... | D. L. Holl..... | 1 | 18 |
| Two Wentworths..... | Harry Gwinner..... | 6 | 165 |
| University of Wisconsin and Mathematics..... | S. T. Sanders..... | 4 | 94 |
| Using the Hessian to Solve a Cubic Equation..... | Jas. A. Ward..... | 8 | 235 |
| Vector Analysis and Trigonometry..... | W. E. Byrne..... | 5 | 130 |
| What is the Solution?..... | W. D. Reeve..... | 5 | 146 |

e
0
7
7
9
9
7
0
0
8
9
0
0
9
1
0
0
2
4
6
7

4
2
5

9
2

2
5

8
5

8

5

8

9

8

5

9

1